Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Accelerating Wireless Broadband Deployment by	)	WT Docket No. 17-79
Removing Barriers to Infrastructure Investment	)	

COMMENTS OF NEPSA SOLUTIONS LLC

nepsa solutions, LLC
401 N. Michigan Avenue
Suite 3200
Chicago, IL 60611
(847) 464-4200
linda@nepsa.com
https://nepsa.com/

Ronald E. Quirk. Jr., Esq.
Marashlian & Donahue, PLLC
1420 Spring Hill Road, Suite 401
Tysons, VA 22102
(703) 714-1305
req@commlawgroup.com
www.commlawgroup.com

June 14, 2017

SUMMARY

The rapid deployment of wireless broadband infrastructure is one of the most important issues in the communications industry today. It is unanimously agreed by industry players, municipalities, and regulatory entities that universal access to reliable 5G wireless services is key to economic growth and enhanced public safety. This is one issue that garners rare bipartisan support in Congress and in state legislatures across the country.

Unfortunately, there are serious matters of contention among municipalities on one side and wireless carriers and infrastructure suppliers on the other, as to how broadband infrastructure siting should be accomplished. One such issue is aesthetics. The Commission seeks comments on whether it should impose rules or guidelines on the aesthetic impact of proposed wireless facilities in localities' wireless infrastructure siting approval processes, as well as deployment in and around national historic sites.

The Commission should not impose draconian rules on municipalities to accept any kind of wireless infrastructure. Rather, the Commission should promote private-public collaboration by releasing guidelines and encourage the parties to negotiate master license/lease agreements and offer to assist with mediation and arbitration if sticking points arise. Wireless network deployment is faster and more efficient when the carriers and municipalities work together.

Regarding national historic sites, the approval process should be streamlined when it is demonstrated that new poles and replacement poles will have minimal impact on those sites. When the "indirect effect" of a pole or tower is minimized by, for example, camouflage, colors consistent with the environment, etc., municipalities' main concerns are addressed, and the process can be truncated to help facilitate deployment of wireless broadband infrastructure.

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COMMENTS OF NEPSA SOLUTIONS LLC

I. INTRODUCTION

nepsa solutions LLC ("*Nepsa*"), by its attorney, hereby submits comments regarding the above-captioned proceeding. *Nepsa* is a growing provider of wireless infrastructure solutions, designed to benefit Smart City initiatives, with offices in Chicago, IL and Palm Beach Gardens, FL. *Nepsa*'s goal is to create smart cities by improving relationships between wireless carriers and municipalities that all too often find themselves at odds with each other regarding wireless infrastructure siting issues.[1]

It is common knowledge in the industry that while wireless carriers[2] and municipalities agree that implementation of wireless broadband facilities serves the public interest and is economically advantageous, each side frequently disagrees with many of the other side's methodologies for making it happen.[3]

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[1] *See* https://*nepsa*.com/solutions/.

[2] Wireless infrastructure suppliers typically are on the same side as wireless carriers regarding siting issues. For brevity's sake, *Nepsa* herein refers only to "wireless carriers" when discussing issues that include wireless carriers and infrastructure providers.

[3] *See, e.g.*, *Reply Comments of the Cities of San Antonio, Texas; Eugene, Oregon; Bowie, Maryland; Huntsville, Alabama; and Knoxville, Tennessee*, WT Docket 16-421 (Apr. 7, 2017) ("*Cities Reply Comments*") at 3*; Reply Comments of Crown Castle International Corp.*, WT Docket No. 16-421 (Apr. 7, 2017) ("*Crown Castle Comments*") at 1-2; *Comments of The Wireless Infrastructure Association*, WT Docket No. 16-421 (Mar. 8, 2017) ("*WIA Comments*") at 1-4; *Comments of the Association of Washington Cities*, WT Docket No. 16-421 (Mar. 8, 2017) ("*Washington Cities Comments*") at 1-2*;* and

The crux of the underlying *Notice of Proposed Rulemaking and Notice of Inquiry* ("*NPRM*" and "*NOI*" respectively) is the solicitation of comments concerning the best means to expedite the deployment of wireless broadband infrastructure consistent with the public interest.[4] To that end, the Commission seeks comments on a number of different issues, including how to balance the need for rapid wireless broadband deployment against the often negative effects of wireless equipment on localities' aesthetics and historic sites.[5] Specifically, the Commission seeks comments on: (a) the proper role of aesthetic considerations in the local permitting and approval processes for wireless infrastructure deployment;[6] and (b) whether, and under what circumstances, should the approval process for wireless siting in or near designated historic sites be streamlined.[7]

Nepsa applauds the Commission's efforts to resolve these issues. A review of recent releases by policy advocates of municipalities and wireless carriers reveals just how daunting that task is.

For example, municipalities have described small cells as:

- **Loud** - noisy cooling fans for computers;
- **Too Tall** – up to 120 feet tall;
- **Too Large** - cabinets the size of refrigerators, for computers and back-up batteries mounted on sidewalk/lawn, bulky cabinets mounted on the sidewalk/lawn, or bulky cabinets mounted on the utility/light pole, right in front of homes and bedroom windows;
- **Downright Messy** – designs that sometimes look like they were put together by an inexperienced amateur, if poorly designed; and

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Reply Comments of Mobilitie, LLC, WT Docket No. 16-421 (Apr. 7, 2017) ("*Mobilitie Reply Comments*") at 1-4.

[4] *See In re: Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, Notice of Proposed Rulemaking and Notice of Inquiry*, FCC 17-38, WT Docket No. 17-79 (April 21, 2017) at ¶ 2.

[5] *Id.* at ¶¶ 66 & 92.

[6] *Id.* at ¶ 92

[7] *Id.* at ¶ 66.

- **Dirty** – diesel generators for backup power.[8]

Wireless carriers beg to differ; asserting that municipalities' aesthetic concerns are often "vague and subjective,"[9] and that any delay in granting permits for infrastructure, especially for aesthetic considerations, is effectively a barrier to entry for wireless carriers in their attempts to deploy badly needed wireless broadband services.[10]

Nepsa urges the Commission to adopt policies that encourage public-private collaboration as an effective means of expediting wireless broadband deployment. Collaboration is not only a successful strategy for encouraging private investment in broadband implementation, it also ensures that networks are deployed intelligently and with minimal impact on the aesthetic character of localities, as well as their historic sites.

II. *NEPSA*'S STANDING IN THIS PROCEEDING

Nepsa's founder, David A. Wigdahl, formed the company after more than 30 years' experience working in cell siting project management. Mr. Wigdahl's experience has given him keen insight into the concerns of municipalities and wireless providers in their efforts to effectively expand communications services. *Nepsa*'s mission is to provide viable and profitable solutions for both sides, working together to build and sustain small cell wireless technology.

To that end, *Nepsa* provides effective wireless infrastructure solutions for mobile network operators and municipalities. These solutions include:

- **A platform for future deployment** of Smart City technologies and applications, including the burgeoning Internet of Things ("*IoT*") industry;

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[8] *See* "10 Key Issues for California Cities & Counties on the Challenges of Small Cells and 'Not So Small Cells,'" Omar Masry, *American Planning Commission, California Chapter*. Text can be found at https://www.apacalifornia.org/news/10-key-issues-for-california-cities-counties-on-the-challenges-of-small-cells-not-so-small-cells/; *see also Comments of Smart Communities Siting Coalition*, WT Docket No. 16-421 (Mar. 8, 2017) ("*Smart Communities Comments*") at 12, describing the "large and intrusive nature" of many types of small cells.

[9] *See Comments of AT&T,* WT Docket No, 16-421 (Mar. 8, 2017 ("*AT&T Comments*") at 9 & 16.

[10] *See WIA Comments* at 56.

- **Streamlined Field Services**, including permits, zoning approvals, deployment and construction services;
- **Revenue-Generating Leases**;
- **Increased Connectivity** for businesses, public safety, municipal operations and individual citizens;
- **Custom Design and Fabrication Services** to meet historic site requirements; and
- **Aesthetically Pleasing, Specially Designed and Purpose-Made Composite Poles.**[11]

Nepsa has a deep understanding of the importance of aesthetics in wireless infrastructure deployment. Today's wireless industry has no set standards for small cells. Consequently, in the rush to implement 5G networks, ugly and poorly sited installations have unfortunately become the norm in many municipalities: unsightly external boxes, cabinets, cables, and other equipment can blight the cityscapes.[12]

Nepsa has partnered with Sternberg Lighting, a seminal designer of decorative street lighting, to create a solution for the small cell aesthetics problem: The *KitstiK*™. The *KitstiK* is a state-of-the-art fiberglass or aluminum pole that houses all wires, radios, cabinets and cables within the pole. Moreover, the *KitstiK* has telescoping heights (up to 38 feet tall), and is designed to be compatible with virtually any environment.[13]

Small cells need to blend into the character of the municipalities in order to be acceptable to the local governments and, more importantly, the residents.[14] Poorly designed small cells sited in residential areas affect not only aesthetics, but can also depress property values and harm the safety of the residents.[15]

Right now, nothing is consistent. A community might agree that small cells are a great idea if it understands that deployments will fit into its environment and that it will benefit from

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[11] *See* https://*nepsa*.com/who-we-serve/mobile-network-operators/ and https://*nepsa*.com/who-we-serve/municipalities/.
[12] *See Exhibit One.*
[13] *See Exhibit Two.*
[14] *See, e.g., Smart Communities Comments* at 29-34.
[15] *Id.* at 29-30.

revenue from the carriers.[16] As the *IoT* industry continues to grow, municipalities will be able to use the infrastructure not only for small cells and related equipment, but also to house *IoT* sensors, thereby generating additional revenue.[17]

The *KitstiK* provides siting consistency and an aesthetically pleasing appearance that both wireless providers and municipalities can appreciate.[18] Moreover, installation is quick and efficient. *KitstiK* components can be produced and shipped anywhere in U.S. within 48 hours.[19] The *KitstiK* is pre-assembled and can be customized to meet the individual site requirements of a given location.[20]

Installation typically takes two hours or less.[21] Once the fiber and electric feed is in the ground, the radios and other equipment are installed in the base of the *KitstiK* and it extends upwards.[22] The *KitstiK* can be customized to maintain an authentic and unobtrusive appearance that works in urban and suburban regions, as well as arts districts, historic districts, and waterfront areas.[23]

As a wireless infrastructure solutions provider that supplies products and services to meet the needs of mobile network operators and the communities they serve, the rules and policies that will be implemented by this rulemaking will substantially impact *Nepsa* and its clients. Accordingly, *Nepsa* has standing to participate in this proceeding.

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[16] *Id.* at 3-8.
[17] *See Connected City Blueprint*, Wireless Broadband Alliance (Dec. 16, 2016) ("*Connected City*") at 12. Text can be found at http://www.wballiance.com/wp-content/uploads/2016/12/Connected-City-Blueprint-V1.pdf.
[18] *See Exhibit Two.*
[19] *See* "New Small Cell Design Promises to Blend In", J. Sharpe Smith, *AGL eDigest* (Dec. 12, 2016). Text can be found at http://www.aglmediagroup.com/tag/*Nepsa*-solutions/.
[20] *Id.*
[21] *Id.*
[22] *Id.*
[23] *See Exhibit Two.*

III. PUBLIC-PRIVATE COLLABORATION EXPEDITIES BROADBAND DEPLOYMENT, WHILE PRESERVING THE CRITICAL AESTHETIC CHARACTER OF CITIES AND TOWNS

In seeking comments on "the proper role of aesthetic consideration in the local approval process" the Commission inquires whether it should "provide more specific guidance on how to distinguish legitimate denials based on evidence of specific aesthetic impacts or proposed facilities, on the one hand, from mere 'generalized concerns' on the other."[24]

It is evident that aesthetic impact is a major consideration in municipalities' wireless infrastructure permitting process. *Nepsa* agrees that the Commission should provide guidance the aesthetic impacts of proposed facilities. The issue of proving specific harm as opposed to "mere generalized concerns" is a bone of contention between the wireless carriers and municipalities.[25]

Accordingly, *Nepsa* suggests that the Commission should not impose draconian rules on municipalities to accept any type of small cell infrastructure. Rather, as discussed in more detail below, the Commission should approach the matter by providing guidelines that encourage the parties to negotiate master license/lease agreements ("*MLAs*"), and offer parties mediation and/or arbitration services if an agreement on the terms can't be reached.

Network deployment is faster and more efficient when carriers cooperate with municipalities to plan adequately and comprehensively for design, permitting, and staging of infrastructure construction.[26] Comprehensive development planning, with frequent collaboration

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[24] *See NOI* at ¶ 92.

[25] *See* sources cited *supra* n.3.

[26] *See Smart Cities Comments* at 35-36; *A City Planner's Abbreviated Response to Comments on Streamlining Deployment of Small Cells (and Not-So-Small Cell) Infrastructure*, WT Docket No. 16-421 (Feb. 12, 2017) ("*City Planner's Comments*") at 1, 9; *Cities Reply Comments* at 9-11; *Reply Comments of the City and County of San Francisco*, WT Docket No. 16-421 (Apr. 7, 2017) ("*San Francisco Reply Comments*") at 2-4; *Connected City* at 48-49; and *Reply Comments of Neo Network Development, Inc.*, WT Docket No. 16-421 (Apr. 7, 2017) ("*Neo Reply Comments*").

and input from both public and private sectors, allows carriers and localities to understand and coordinate each other's plans and timelines. The results are favorable to both sides.[27]

Private-public cooperation is especially critical when aesthetics are at issue.[28] An experienced and well-respected expert on broadband infrastructure siting sums it up nicely: "The importance of successful site permitting cannot be [over]stated for small cells, with aesthetics playing a critical role . . . . Operators, equipment vendors, and municipalities must work together to ensure mobile broadband access continues to thrive, expanding economic development. The look and design of modern small cell equipment is intrinsic to this goal."[29]

Some wireless carriers acknowledge this fact and have expressed willingness to work with municipalities to address aesthetic issues when deploying broadband equipment.[30] The inclination toward cooperation on this issue exists – it's a matter of letting the parties sort things out their differences with solid FCC guidelines, but without sweeping rules.

To that end, the Commission should create an *MLA* process governing small cells and related equipment on existing utility poles, propriety community property (street lights or traffic signal poles), and the placement of new poles owned by the municipality, a public or private partner, regulated utility, or certified wireless carrier. This could be accomplished by the Commission issuing a set of *MLA* guidelines based on the terms of successful existing *MLAs* between wireless carriers and municipalities, and offering the parties the option to have the

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[27] *See Cities' Reply Comments* at 11.
[28] *See Report and Declaration of Andrew Afflerbach for the Smart Cities Communities Siting Coalition*, WT Docket No. 16-421 (Mar. 8, 2017) ("*Afflerbach Report*") at 22-25; *Neo Reply Comments* at 1-4; and *City Planner's Comments* at 9.
[29] *See* "Looks Still Matter for Small Cells," Steve Kemp, *Commscope Blog* (Aug. 24, 2015). Text can be found at http://www.commscope.com/Blog/Looks-Still-Matter-for-Small-Cells/.
[30] *See, e.g., Reply Comments of Mobilitie, LLC*, WT Docket No. 16-421, April 7, 2017 ("*Mobilitie Comments*") at 13. "[G]iven localities' concerns with taller poles, the company is committed to working with municipalities to develop appropriate locations consistent with surrounding structures and streetscapes." *Id.*

Commission mediate or arbitrate *MLAs* when agreement cannot be made. The FCC could do this in a manner similar to its current interconnection agreement resolution rules.[31]

Issuing *MLA* guidelines and encouraging collaboration between wireless carriers and municipalities would help to expedite the deployment of wireless broadband while protecting the municipalities' aesthetic considerations and historic preservation polices. Because this approach encourages transparency - both parties would have incentive to share information to maximize pre-construction planning and minimize likely points of conflicts – the deployment process can proceed smoothly and quickly.

The Commission highlighted a successful example of a private-public *MLA* process in its FCC DAS/Small Cell Workshop ("*Small Cell Workshop*") held on May 6, 2016.[32] A comprehensive process was undertaken between the City of San Antonio and Verizon Wireless to support the carrier's small cell deployment.[33] Through collaboration that addressed a city-wide plan and accommodations for city aesthetics, the parties executed an effective *MLA* ("*San Antonio MLA*") for, among other things, the use of city right-of-ways for the installation of small cell equipment. The process enabled Verizon to plan ahead, with predictability and stability, while simultaneously enabling the city to protect key public interests such as public safety, and cultural aesthetics which are key to San Antonio's lucrative tourism industry.[34]

In fact, preservation of the city's aesthetics was a critical factor in the successful execution of the *San Antonio MLA*.[35] The parties agreed that all design plans for small cell site

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[31] *See* 47 C.F.R. § 51.807.
[32] *See* "San Antonio: Striking the Balance", Ron Nirenberg, San Antonio City Councilmember, FCC-IAC, FCC DAS/Small Cell Workshop (May 3, 2016).
[33] *Id.*
[34] *Id.* at 5-7.
[35] *Id.*; *See also Cities' Reply Comments* at 11; Master License Agreement Between the City of San Antonio and San Antonio MTA, L.P. D/B/A Verizon Wireless for Use of Public Rights of Way (text can

installations must be compatible with the character and aesthetics of downtown neighborhoods and public spaces, and that licensees are required to "implement design concepts and [use] camouflage or stealth materials, as necessary to blend its installations with the overall character of downtown locations selected as Small Cell Sites."[36]

This is exactly the type of scenario that led *Nepsa* to develop the *KitstiK*. *Nepsa*'s experience with municipalities revealed that camouflage and stealth equipment is critical to their aesthetic considerations. The *KitstiK* can blend in with most any environment, which ensures that small cells meet the community standards of municipalities.[37]

The City of San Francisco presented another example at the FCC Small Cell Workshop of how successful public-private *MLAs* expedite wireless broadband deployment while protecting the cultural heritage of a municipality.[38] The city emphasized the importance of wireless broadband, while at the same time explaining the importance of "good quality design standards that are adaptive to future challenges, consistent among wireless carriers, and respectful of current and future streetscapes."[39]

San Francisco has *MLAs* with various carriers that are increasing wireless broadband coverage while protecting the city's aesthetics.[40] These *MLAs* have resulted in rapid permitting of and installation of small cells, illustrating that protecting municipalities' aesthetics is not tantamount to a "barrier to entry" for carriers implementing wireless broadband infrastructure.[41]

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be found at https://sanantonio.legistar.com/LegislationDetail.aspx?ID=2356430&GUID=7C14D0C0-8C7A-48BB-87B9-D7BFC1DEA59B).

[36] *See* San Antonio MLA at 18.

[37] *See Exhibit Two.*

[38] *See* "City & County of San Francisco, FCC/NATO," Miguel A. Gamino, Jr., City Chief Information Officer and Omar Masry, AICP, Senior Analyst (May 3, 2016).

[39] *Id.* at 4-5 & 8.

[40] *Id.* at 7

[41] *See San Francisco Reply Comments* at 2-4.

The City of Edina, MN has implemented small cell siting procedures that provide yet another example of how localities' collaboration with wireless carriers results in rapid implementation of wireless broadband. When Edina first heard about the need for small cell densification, it amended its ordinance to address the concerns of the community and then drafted an *MLA*, containing guidelines that wireless carriers must follow, including the aesthetic requirements for their small cell facilities.[42] A number of telecommunications carriers signed Edina's *MLA*, and were rapidly granted small cell sites; both parties are happy and the city's character is preserved.[43]

Conversely, when municipalities are forced to adopt a "one-size fits all" infrastructure siting policy with little regard for aesthetics, the results can be disastrous: ugly, bulky small cells are often installed in residential areas.[44] When municipalities are presented with a "take it or leave it" choice, local aesthetics degrade the locality which often results in economic decline.[45] More FCC rules requiring municipalities to conform to one narrow set of policies are not the answer.

Moreover, if the FCC were to impose such rules, it is likely that they would be immediately challenged by various municipalities on constitutional and other grounds.[46] This would inordinately delay the implementation of the rules that are intended to streamline wireless broadband deployment.

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[42] *See Comments of the City of Edina*, WT Docket No. 16-421 (Mar. 6, 2017) at 1.
[43] *Id.* at 2.
[44] *See A City Planners abbreviated Response to Comments on Streamlining Deployment of Small Cells*, Omar Masry, AICP, WT Docket No. 16-421 at 1; *see also Cities' Reply Comments* at 7-11.
[45] *Id.* at 3-5; *see also Cities' Reply Comments* at 11 and *An Open Letter to the Wireless Industry, Part (Part 1)* (April 14, 2017) at 1-5. Text can be found at https://nouglytowers.com/category/ugly-cell-towers/.
[46] *See, e.g., Comment of the League of Minnesota Cities*, WT Docket No. 16-421 (Mar. 6, 2017) at 6-14.

Encouraging the successful collaboration between wireless carriers and municipalities by issuing sensible *MLA* guidelines and offering mediation and arbitration services[47] would be a much more efficient means of expediting the deployment of wireless broadband in the U.S. And, because local aesthetics is a crucial issue, any such *MLA* guidelines should address this issue in a manner illustrated by the applicable sections of the *San Antonio MLA*[48] and other *MLAs* that have successfully resulted in rapid deployment of wireless broadband infrastructure with the community standards of the municipalities.

IV. SECTION 106 REVIEW FOR NEW POLES AND POLE REPLACEMENTS CAN BE ELIMINATED WHEN THERE IS MINIMAL IMPACT ON HISTORIC SITES

The Commission also seeks comments on whether it should exclude pole replacements from Section 106 review, when such replacements would help to expedite wireless facility siting, while "creating no or foreseeably minimal potential for adverse impacts to historic properties."[49]

Section 106 of the National Historic Preservation Act of 1966 ("*NHPA*") requires the Commission to take into account the effects of its proposed undertakings on historic properties.[50] These undertakings typically include projects, activities, or programs that require a permit, a license, or approval from the FCC. The Advisory Council on Historic Preservation ("*Council*") has codified rules implementing Section 106,[51] which require the Commission to consult with the applicable State Historic Preservation Officer ("*SHPO*") or Tribal Historic Preservation Officer

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[47] With minor variations, the procedures spelled out in Section 51.807 of the Commission's Rules for interconnection agreements could be applied to arbitration and mediation of MLAs. The Commission could, for example, provide detailed guidelines for MLAs, require the parties to negotiate in good faith, provide standards and windows of time for the parties to request and engage in mediation or arbitration.
[48] *See* San Antonio MLA at 18. *Nepsa* submits that it would agree with the elements of the proposed "Best Practices Guide" detailed in the *Neo Reply Comments,* which is a workable public-private model.
[49] *See NPRM* at ¶ 68.
[50] *See* 16 U.S.C. § 470f.
[51] *See* 36 C.F.R. Part 800.

("*THPO*") on these matters, and subjects proposed siting of infrastructure on or near historic sites to an often lengthy review process.

Section 106 consultation for FCC undertakings takes place under one of two nationwide Programmatic Agreements according to the Counsels rules. The 2001 Programmatic Agreement ("*Collocation PA*") provides for the exemption of particular types of antennae collocations from Section 106 review. The 2004 Programmatic Agreement ("*Nationwide PA*") is a more broadly applicable agreement that streamlines the Section 106 review of FCC actions that are not exempt under the *Collocation PA*.

An important exemption to Section 106 review as listed in the *Nationwide PA* is construction of a facility (including towers and antennas) in any area designated by the SHPO/THPO as having "limited potential to affect Historic properties."[52] The Commission proposes that exemptions such as this one should include replacement of poles, regardless of whether it is located in a historic district, as long as the replacement pole is not substantially larger than the pole it is replacing.[53] The Commission further proposes that such an exemption should also apply to replacement poles in rights-of-way, and poles that were originally constructed for purposes other than supporting antennas, and are thus not "towers" under the *Nationwide PA* definition.[54]

The Section 106 process can often be very time-consuming, inordinately delaying the siting of infrastructure, as many parties take part in the review, particularly if a potential "adverse effect" is determined.[55] Accordingly, *Nepsa* agrees with the Commission's proposals

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[52] *See Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission*, FCC 04-222 (Sept. 2004) ("*Nationwide PA*") at III.F.
[53] *See NPRM* at ¶ 68.
[54] *Id.*
[55] *See* 36 C.F.R. Part 800.

concerning exempting pole replacement. *Nepsa* adds that the Commission should, as described below, strengthen the Section 106 exemption for new poles that have a minimal adverse impact on historic properties.

Nepsa agrees that historic properties should be protected from encroachment of unsightly wireless infrastructure, and that concerns of the guardians of historical properties must be honored, as they know better than anyone the value of those properties. That is why *Nepsa* advocates that poles should be exempt from Section 106 review if, and only if, they have no or very minimal impact on historic sites.

A very important concern of historic site caretakers vis-à-vis Section 106 review is the "indirect effect" of a pole or tower, *i.e.*, the "effect on significant cultural resources in the immediate vicinity."[56] They note that small cell installations are not an original part of historic sites and that state and local governments should preserve those sites by minimizing the impact of intrusive modern installations "by camouflage, by requirements of using consistent colors on poles, or by carefully determining what spaces are appropriate for such installations."[57]

Nepsa agrees that localities should have the right to preserve their historic sites. *Nepsa* has heard from community leaders that historic preservation is an important and growing concern. Municipalities are looking to differentiate themselves as a way to compete for residents, business and revenue, while maintaining the historic and authentic appearance that often defines what they are.

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[56] *See, e.g., Comments of The Osage Nation*, WT Docket No. 16-421 (Apr. 7, 2017) ("*Osage Nation Comments*") at 5.

[57] *See Reply Comments of the City of Minneapolis, Minnesota*, WT Docket No. 16-421 ("*Minneapolis Reply Comments*") at 13.

Nepsa designed the *KitstiK* to not only blend in with, but enhance historic sites.[58] The *KitstiK* uses camouflage, and can be designed with colors consistent with any historic environment.[59] As described above, the *KitstiK*'s look is a clean one, requiring no boxes, cabinets or cables on the outside. The product is made of fiberglass-reinforced plastic or aluminum, so it will look good for decades without corroding, rusting or rotting. It is fire-resistant and impervious to damage by birds, insects and water.

Because the *KitstiK* can be custom designed to preserve the character of historic sites, the *KitstiK* and similar types of small cell infrastructure should be exempt from Section 106 review. *Nepsa* suggests that the Commission codify that all historic-compatible poles, not just replacements, should be exempt from Section 106 review. Moreover, the term "minimal adverse impact" should be specifically defined, in a manner described by the *Minneapolis Reply Comments*, *e.g.*, "camouflage" and "consistent colors."[60]

Exempting the *KitstiK* and similar poles from Section 106 review would expedite the deployment of wireless broadband while protecting the character of historic properties. An illustrative example of the benefits of this is The Ben Franklin Parkway Project ("*Project*"), as presented at the Commission's Small Cell Workshop.

The Project required the City of Philadelphia and wireless carriers to install sufficient wireless infrastructure to handle the demand of the 900,000 people who greeted the Pope on his visit to the city.[61] This Project was even more daunting by the fact that it had to be accomplished

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[58] *See Exhibit Two.*
[59] *Id.*
[60] *See Minneapolis Reply Comments* at 5.
[61] *See* "Ben Franklin Parkway Project, FCC Panel" FCC DAS/Small Cell Workshop (May 3, 2016) at 3.

in nine months, while preserving the historic beauty of the Ben Franklin Parkway.[62] This required, among other things, that the infrastructure be unobtrusive and visually appealing.[63]

The contractors miraculously managed to complete the Project just in time for the Pope's visit, in spite of a Section 106 review, which resulted in the in the time consuming tasks of locating suitable poles, adding and replacing numerous poles.[64] The contractors had to paint and adjust the poles to fit in with the surrounding areas. This resulted in a great deal of uncertainty as to whether the Project could be completed on time.[65]

If the contractors had been able to order customized *KitstiKs,* and the *KitstiKs* were exempt from Section 106 review, the Project would have gone much quicker and easier. The *KitstiKs* would have been custom-designed to blend into the Ben Franklin Parkway, and when the contractors received them, the *KitstiK*s would have been ready to install. Without a Section 106 Review, the ordering process would have been expedited.

The Project is just one example of situations wherein cities across the country are called upon to rapidly install small cells in historical sites. The *KitstiK* is tailor-made for such scenarios. It should be exempted from Section 106 review when deployed in and near historic sites.

V. BROADBAND INFRASTRUCTURE SHOULD BE SUBSIDIZED WITH FUNDS EARMARKED FOR LOCALITIES

More than 60 mayors and city and county leaders recently sent a letter to Congress and the President, stating that broadband infrastructure funding should be included in the proposed multi-billion dollar infrastructure plan that was introduced by Congress in January 2017.[66] These

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[62] *Id.*
[63] *Id.* at 5.
[64] *Id.* at 7.
[65] This information was presented by one of the panelists at the event.
[66] *See* "Next Century Cities Letter" to President Trump, Senator Mitch McConnell, and Speaker of the House Paul Ryan (Mar. 1, 2017) at 1.

municipal principals asserted that "[b]roadband Internet access is a necessary infrastructure, and key to prosperity. It empowers entrepreneurship and economic growth, arms our teachers and students for success in the classroom, and gives our citizens a voice in the national dialog on our future."[67]

Nepsa agrees with these municipal leaders and encourages the Commission to work with Congress to fund wireless broadband infrastructure. More specifically, *Nepsa* urges the Commission to heed the municipal leaders' call for funding local solutions for broadband: "city governments have been leaders in designing their own networks, implementing private-public partnerships, and leading the way with new multi-provider, open access delivery models. Any infrastructure plan should include funding for these arrangements."[68]

This exemplifies what *Nepsa* is advocating in these comments: a private-public partnership to enable the rapid growth of wireless broadband, while preserving the aesthetics of the localities which house the infrastructure.

FCC Chairman Pai agrees that broadband infrastructure should be subsidized - through the Federal Universal Service Fund, stating that, "our wired and wireless broadband networks are core components of our nation's infrastructure."[69] *Nepsa* concurs with the Chairman's idea, but asserts that the bulk of any wireless broadband funding should be allocated to municipalities.

VI. CONCLUSION

Nepsa concurs wholeheartedly with the Commission's goal of expediting the deployment of wireless broadband infrastructure. The evidence shows that public-private collaboration is

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[67] *Id.*
[68] *Id.* at 2.
[69] *See* "FCC Chairman Pai: Any Infrastructure Bill Should Include Broadband Funding via USF", *Telecompetitor* (Mar. 16, 2017) (text can be found at http://www.telecompetitor.com/fcc-chairman-pai-any-infrastructure-bill-should-include-broadband-funding-via-usf/).

most effective in achieving that goal while ensuring that municipalities' aesthetics, culture, and historic sites are honored and preserved.

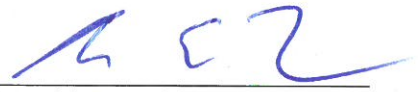
Accordingly, *Nepsa* urges the Commission to refrain from imposing draconian rules that would force municipalities to accept any type of small cell infrastructure decreed by wireless carriers. A better solution would be for the Commission to issue concrete guidelines for *MLAs* between carriers and municipalities, and offer mediation and arbitration services to expedite the execution of mutually beneficial *MLAs*.

The Commission should also strengthen the Section 106 review exemption for new poles that have minimal impact on historic sites. *Nepsa* agrees that the Commission should adopt its proposed exemption for replacement poles.

Further, the Commission should work to fund municipalities' wireless broadband infrastructure projects. Wireless broadband is key to economic growth and opportunities, and as localities best understand what they need in the way of wireless connectivity, they should be entrusted with funding for their infrastructure projects.

Respectfully submitted,

NEPSA SOLUTIONS LLC

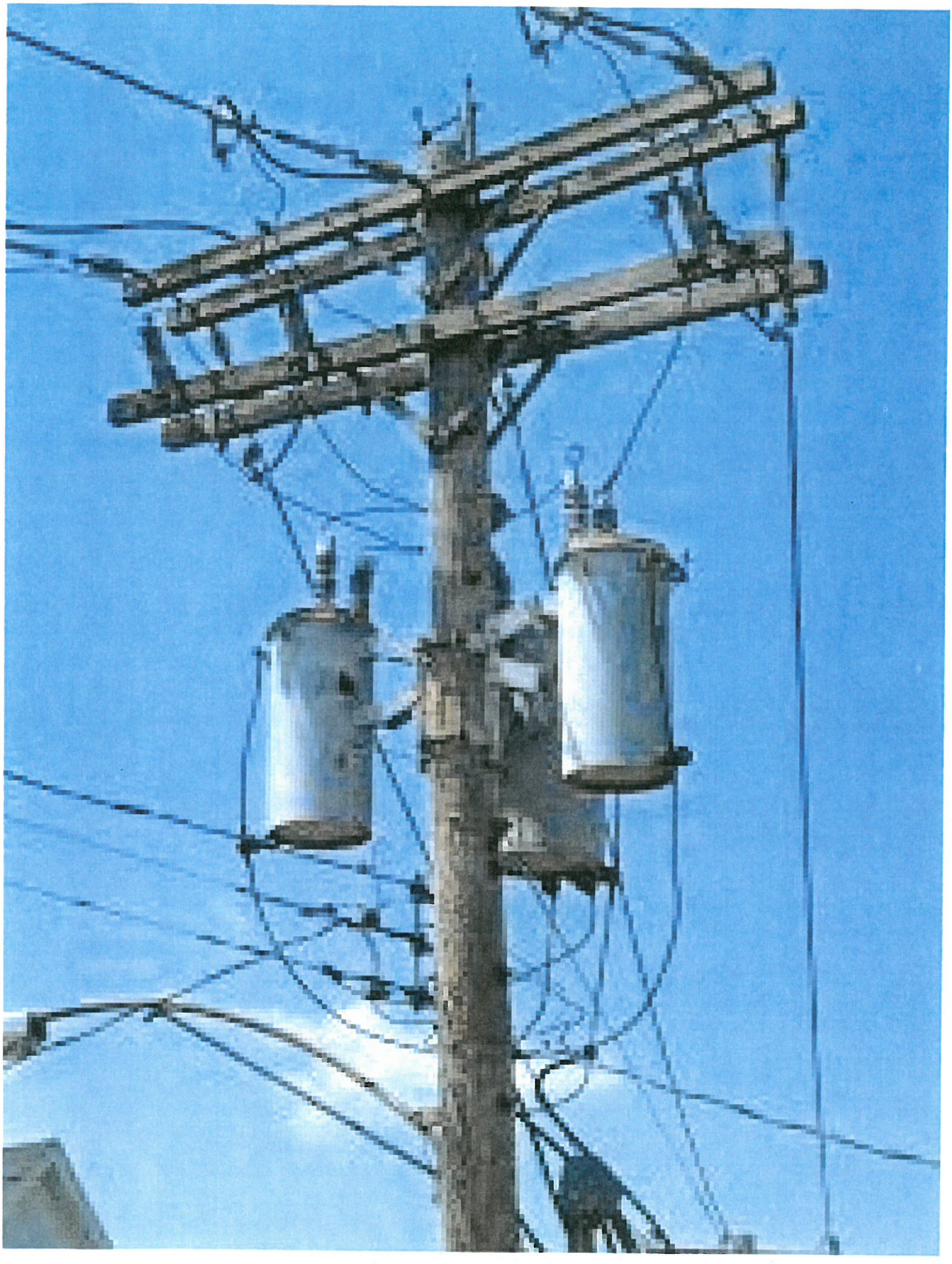
By: 

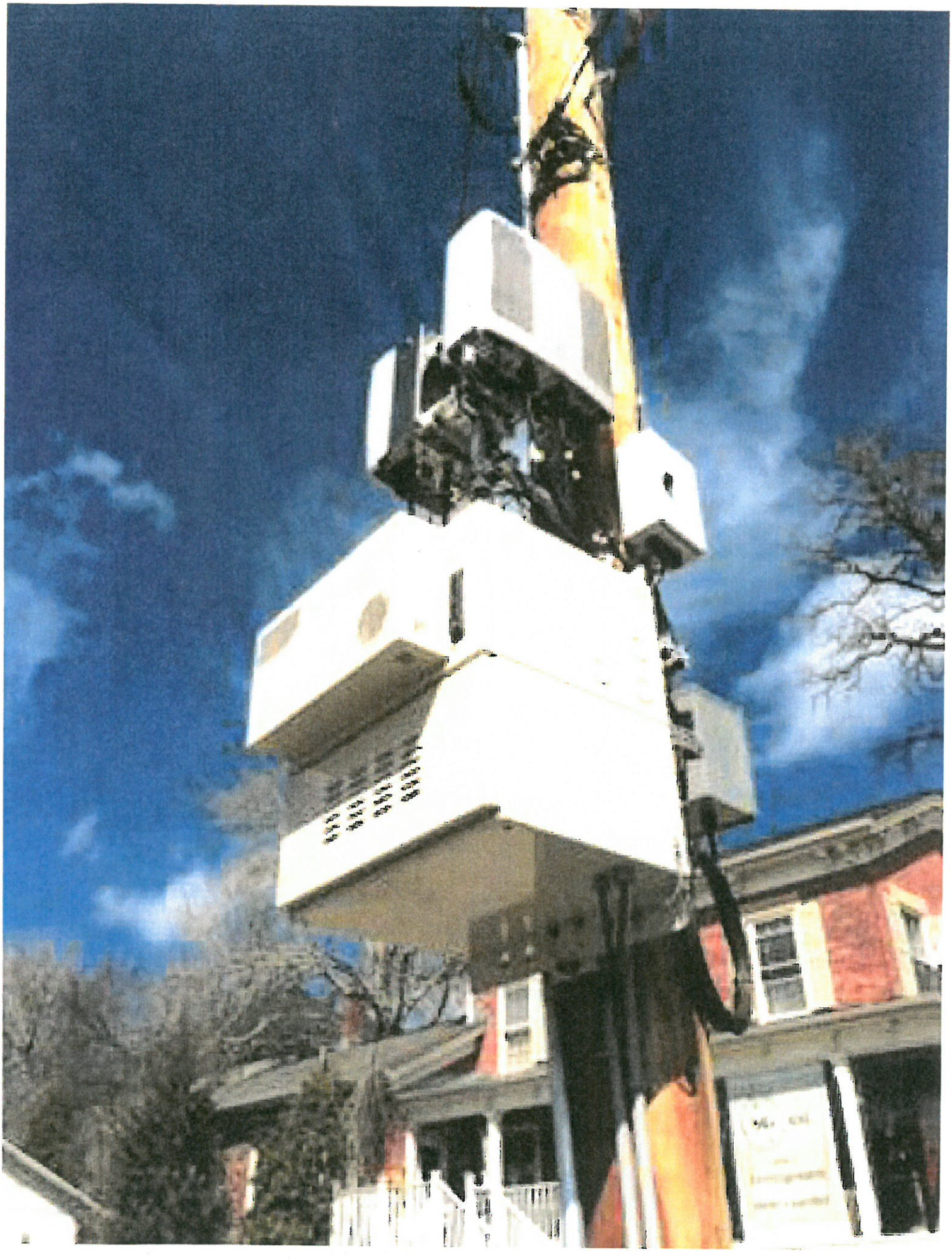
Ronald E. Quirk Jr.
Marashlian & Donahue, PLLC
1420 Spring Hill Road
Suite 401
Tysons, VA 22102
(703) 714-1305

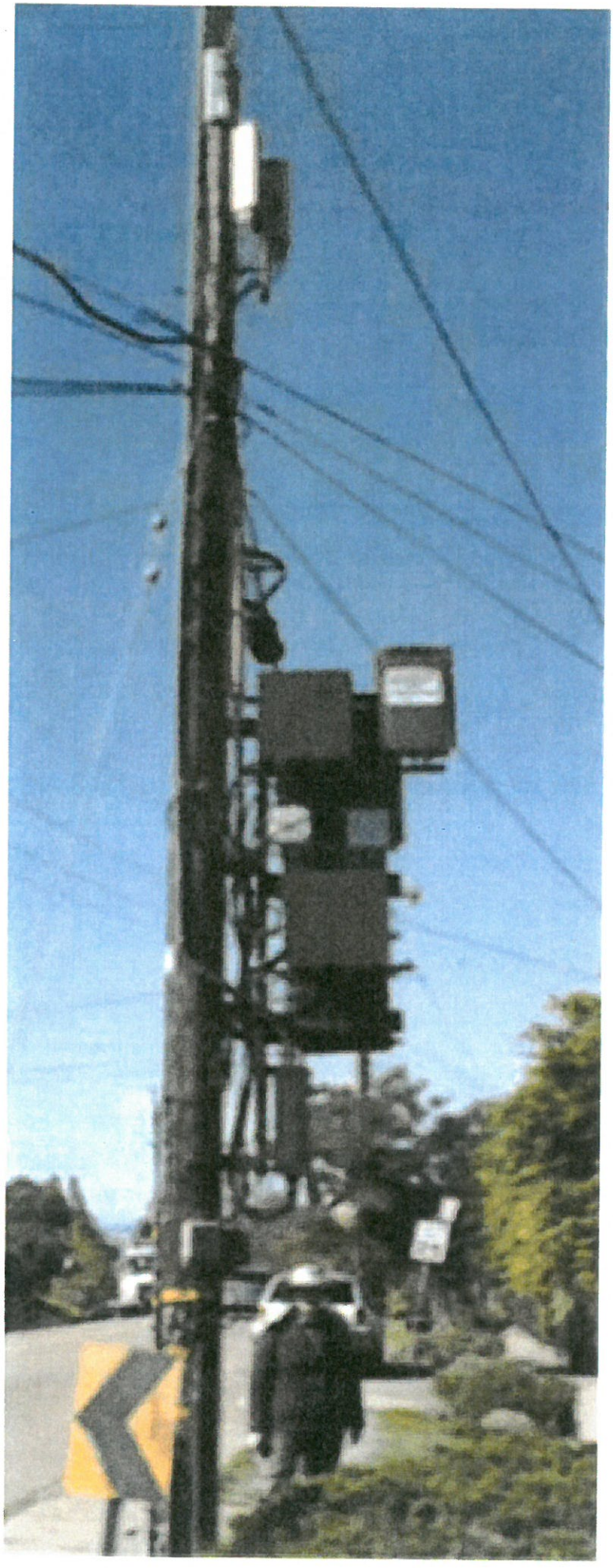
Its Attorney

June 14, 2017

EXHIBIT ONE







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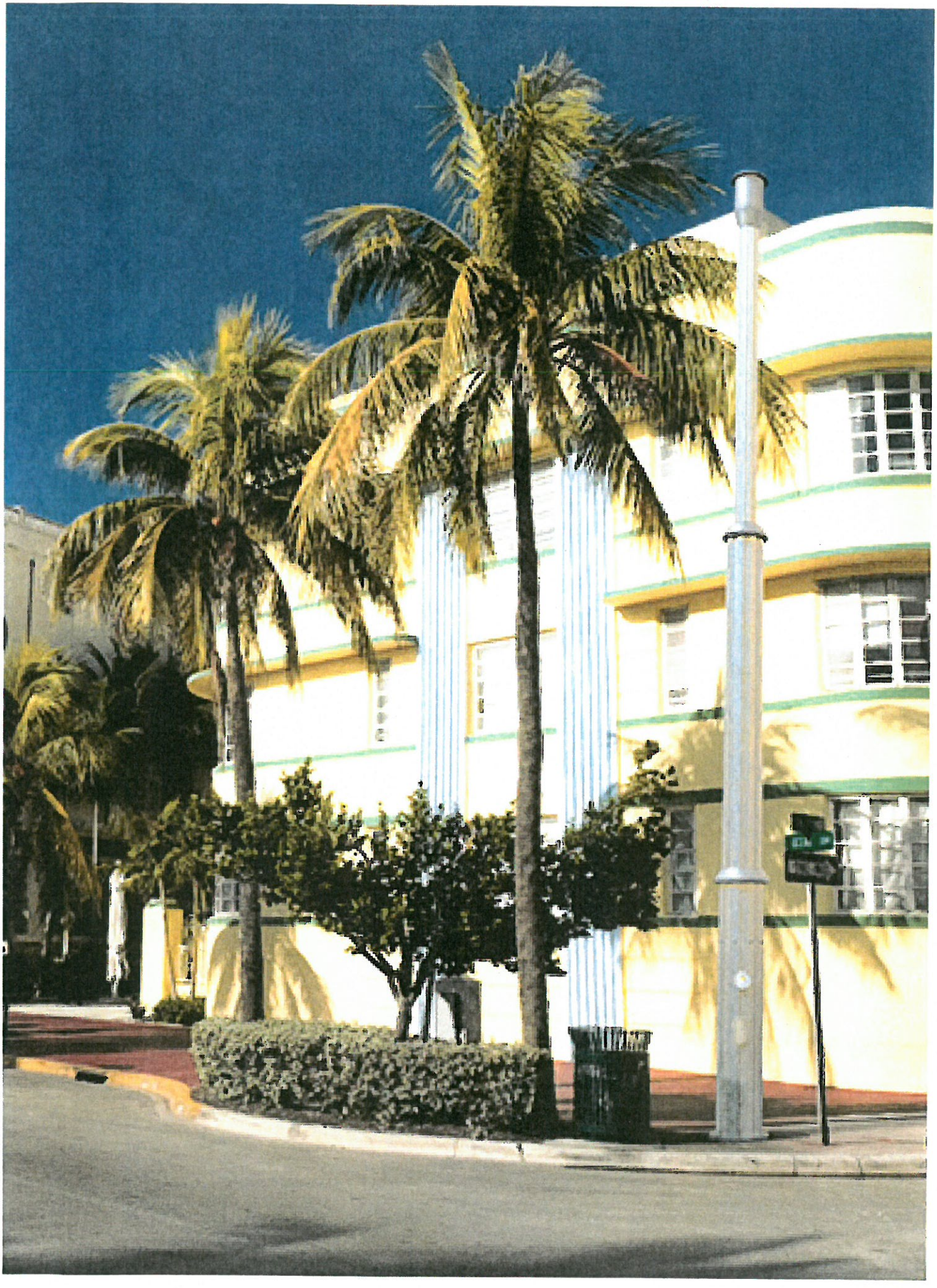

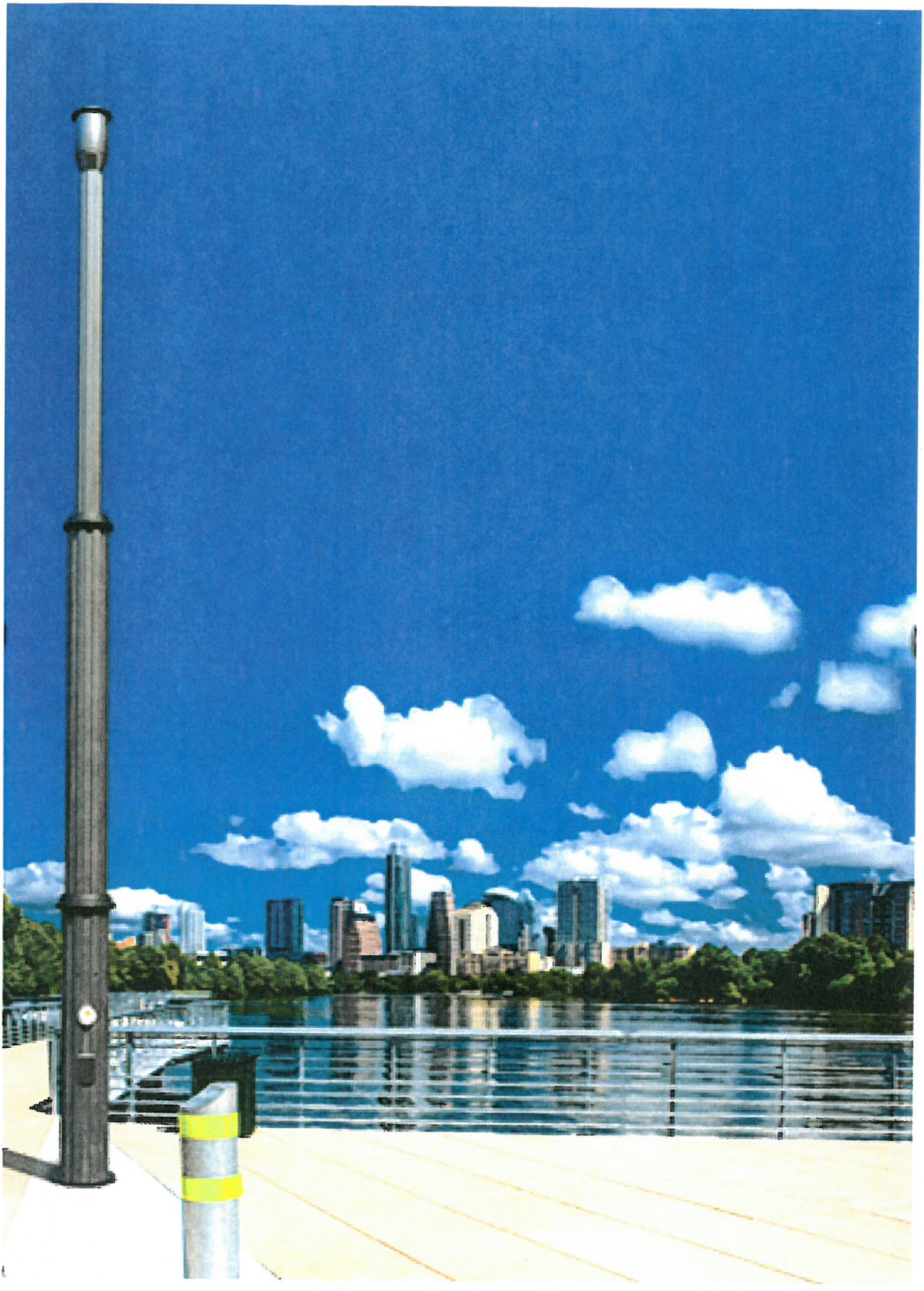


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